

Table S1. Additional information on strains shown in Figure 5A.

Accessions	Year	Location	Sources
SRR7084750	2009	CT, USA	Miscellaneous food
SRR7084756	2009	NM, USA	Frog
SRR7084744	2010	NH, USA	Bovine
SRR7084695	2010	MN, USA	Miscellaneous food
SRR7084675	2011	IN, USA	Human
SRR7084764	1995	MN, USA	Human
SRX332925	2008	NY, USA	Poultry
SRR1635123	2012	United Kingdom	Human
SRX878605	2005	MN, USA	Swine
SRX643203	2013	NV, USA	Human
SRX885391	2006	CT, USA	Poultry
SRX581772	2004	NY, USA	Poultry
SRX955781	2005	NY, USA	Poultry
SRX722040	2004	TN, USA	Poultry
SRX495451	2002	CT, USA	Poultry
SRX495427	2002	CT, USA	Poultry
SRX492546	2013	KY, USA	Poultry
SRX690894	2003	MN, USA	Wild bird
SRX590684	2007	WA, USA	Wild bird
SRX821387	2005	MN, USA	Wild bird
SRX690002	2003	MN, USA	Wild bird
SRX529474	2010	MN, USA	Wild bird
SRX807332	2012	VA, USA	Wild bird
SRX641512	2007	ID, USA	Bovine
SRX349411	2005	WA, USA	Bovine
SRX529472	2009	MN, USA	Bovine
SRX529500	2008	MN, USA	Bovine
SRX529503	2008	MN, USA	Bovine
SRX529483	2008	MN, USA	Bovine
SRX590692	2007	WA, USA	Bovine
SRX590691	2007	WA, USA	Bovine
SRX547035	2006	WA, USA	Bovine
SRX656683	2007	WA, USA	Bovine
SRX462194	2009	MN, USA	Bovine
SRX641680	2007	OR, USA	Bovine

SRX553397	2004	CT, USA	Poultry
SRX547072	2006	WA, USA	Bovine
SRX517502	2008	NY, USA	Bovine
SRX507986	2008	NY, USA	Bovine
SRX696144	2013	MN, USA	Human
SRX749841	2004	MN, USA	Feline
SRX869044	2009	Belgium	Swine
SRX462121	2010	MN, USA	Swine
SRX799132	2004	MN, USA	Swine
SRX515715	2007	MN, USA	Swine
SRX696195	2003	NC, USA	Swine
SRX700268	2003	AR, USA	Swine
SRX626721	2002	MN, USA	Swine
SRX734181	2008	Mexico	Miscellaneous food
SRX332892	2006	NY, USA	Swine
SRX523533	2008	VA, USA	Miscellaneous food
SRX675858	2009	CO, USA	Miscellaneous food
SRX461983	2010	MN, USA	Poultry

Metadata: *Salmonella* Typhimurium genomes were randomly selected from Appendix Table 1 of:

Zhang, S., Li, S., Gu, W., Den Bakker, H., Boxrud, D., Taylor, A., Roe, C., Driebe, E., Engelthaler, D. M., Allard, M., Brown, E., McDermott, P., Zhao, S., Bruce, B. B., Trees, E., Fields, P. I., & Deng, X. (2019). Zoonotic source attribution of *Salmonella* enterica serotype typhimurium using genomic surveillance data, United States. Emerging Infectious Diseases, 25(1), 82–91. <https://doi.org/10.3201/eid2501.180835>

Figure 5B supplemental table.

Accessions	Year	Location	Sources
SRR647541	1999	WA, USA	Human
SRR647544	1999	WA, USA	Human
SRR647545	1999	WA, USA	Human
SRR436892	2009	MA, USA	Human
SRR436893	2009	MA, USA	Human
SRR436894	2009	MA, USA	Human
SRR394743	2009	ME, USA	Human
SRR436895	2009	ME, USA	Human
SRR436897	2009	ME, USA	Human
SRR436898	2009	ME, USA	Human
SRR436899	2009	ME, USA	Human
SRR436900	2009	MA, USA	Human
SRR436901	2009	MA, USA	Human
SRR436902	2009	MA, USA	Human
SRR647526	1998	WA, USA	Human
SRR647538	1998	WA, USA	Human
SRR647540	1998	WA, USA	Human
SRR647543	1998	WA, USA	Human
SRR646541	1998	WA, USA	Human
SRR647537	1998	WA, USA	Human
SRR647539	1998	WA, USA	Human
SRR647530	2000	WA, USA	Human
SRR647531	2000	WA, USA	Human
SRR647532	2002	WA, USA	Human
SRR647533	2002	WA, USA	Human
SRR647534	2002	WA, USA	Human
SRR647536	2002	WA, USA	Human
SRR646555	2005	MO, USA	Human
SRR647527	2003	WA, USA	Human
SRR647528	2003	WA, USA	Human
SRR646549	2005	MO, USA	Human

SRR646552	2005	MO, USA	Human
SRR647524	2001	WA, USA	Human
SRR647525	2001	WA, USA	Human
SRR646514	2000	WA, USA	Human
SRR646515	2000	WA, USA	Human
SRR646516	2000	WA, USA	Human
SRR646517	2000	WA, USA	Human
SRR646544	2000	WA, USA	Human
SRR646547	2000	WA, USA	Human
SRR646518	2001	WA, USA	Human
SRR646519	2001	WA, USA	Human
SRR646558	2000	WA, USA	Human
SRR646563	2000	WA, USA	Human
SRR390910	2006	USA, USA	Human
SRR394003	2006	USA, USA	Human
SRR394631	2006	USA, USA	Human
SRR394001	2006	USA, USA	Human
SRR394603	2006	USA, USA	Human
SRR394794	2007	TN, USA	Human
SRR436903	2007	TN, USA	Human
SRR436906	2007	TN, USA	Human
SRR436905	2007	TN, USA	Human
SRR436907	2007	TN, USA	Human
SRR436908	2007	TN, USA	Human
SRR396680	2007	USA, USA	Human
SRR427063	2008	PA, USA	Human
SRR393960	2002	USA, USA	Human
SRR371533	2008	PA, USA	Human
SRR537020	2008	PA, USA	Human
SRR427073	2007	PA, USA	Human

Metadata: *E. coli* genomes were selected from supplementary Table 1 in:

Rusconi, B., Sanjar, F., Koenig, S. S. K., Mammel, M. K., Tarr, P. I., & Eppinger, M. (2016). Whole genome sequencing for genomics-guided investigations of *Escherichia coli* O157:H7 outbreaks. *Frontiers in Microbiology*, 7(JUN), 1–21. <https://doi.org/10.3389/fmicb.2016.00985>

Table S2 Relative abundance of each bacterial genus depicted in Figure 6.

name	<i>E. coli</i> 1 h	<i>E. coli</i> 3 h	<i>E. coli</i> 6 h	<i>E. coli</i> 10 h	<i>E. coli</i> 15 h	<i>Salmonella</i> 1 h	<i>Salmonella</i> 3 h	<i>Salmonella</i> 6 h	<i>Salmonella</i> 10 h	<i>Salmonella</i> 15 h
<i>Acinetobacter</i>	0.14246	0.14246	0.14278	0.14164	0.1421	0.03004	0.03031	0.0297	0.0292	0.02926
<i>Bacillus</i>	0.32996	0.32844	0.32878	0.32929	0.3288	0.2434	0.24238	0.24193	0.24133	0.24112
<i>Citrobacter</i>	0.00413	0.00383	0.00369	0.00387	0.00363	0	0.00017	0.00015	0.00011	0.00011
<i>Clostridium</i>	0.00056	0.0005	0.00057	0.00055	0.00051	0.00079	0.00079	0.00071	0.00074	0.0007
<i>Cronobacter</i>	0.00056	0.00048	0.00046	0.00059	0.00058	0	0	0	0.00008	0.00006
<i>Enterobacter</i>	0.00319	0.00334	0.00331	0.00333	0.00334	0.00358	0.00369	0.0037	0.00377	0.00362
<i>Enterococcus</i>	0.00283	0.00298	0.00296	0.00288	0.00302	0.54526	0.54354	0.54249	0.54237	0.54177
<i>Escherichia</i>	0.46415	0.46294	0.46168	0.46159	0.46095	0.00418	0.00349	0.00355	0.00313	0.00313
<i>Klebsiella</i>	0.01635	0.01639	0.01607	0.016	0.0161	0.008	0.00812	0.00808	0.00811	0.008
<i>Kosakonia</i>	0.00914	0.00935	0.00965	0.00957	0.00972	0.00161	0.0019	0.00194	0.0019	0.00197
<i>Pantoea</i>	0.0005	0.00056	0.00054	0.00054	0.0005	0	0.00019	0.00017	0.00019	0.00018
<i>Pseudomonas</i>	0.00131	0.00112	0.00109	0.00112	0.00118	0.00126	0.00131	0.00119	0.00101	0.00101
<i>Salmonella</i>	0	0	0	0	0	0.14486	0.14538	0.14601	0.14597	0.14599
<i>Shigella</i>	0.01705	0.01742	0.01757	0.01751	0.01738	0	0	0.00015	0.00011	0.00013
<i>Staphylococcus</i>	0	0.00025	0.00027	0.00027	0.00027	0.00059	0.00046	0.00047	0.00042	0.00042
<i>Streptomyces</i>	0	0	0.00012	0.00009	0.00009	0	0.00016	0.00013	0.00019	0.00017
<i>Weissella</i>	0	0	0	0.00007	0.00006	0.00728	0.00731	0.00754	0.00764	0.00735
Others	0.00781	0.00994	0.01046	0.01109	0.01177	0.00915	0.0108	0.01209	0.01373	0.01501